BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.

In the Matter of	)	
	)	
Revision of the Commission's Rules to	)	**CC Docket No. 94-102**
Ensure Compatibility With Enhanced	)	RM-8143
Enhanced 911 Emergency Calling System	)	

PETITION FOR RECONSIDERATION FROM THE INDEPENDENT CELLULAR SERVICES ASSOCIATION AND CELLTEK & MT COMMUNICATIONS

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July 27, 1999

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The Independent Cellular Services Association ("ICSA") submits its Petition for Reconsideration in the above captioned proceeding. These comments are in response to the Second Report and Order FCC 99-96 which addresses the improvement in the ability of analog cellular telephones to successfully complete wireless 911 calls. ICSA represents a group of small companies that sell cellular telephones and service. In 1994, we petitioned the FCC to permit cellular extension telephones that operate in the same manner as wireline phones in homes and businesses which use the same number. ICSA noted in early 1998 through the press that several of the issues in Docket 94-102 were identical to those of 92-115. ICSA then joined in filing comments and making ex parte presentations to the Commission on how its members and ideas could dramatically increase wireless public safety. ICSA is filing this petition because it believes that the Commission should take some additional steps as suggested by ICSA in its filings beyond the "small ones"[1] that that the Commission acknowledged were in this Report and Order.

[1] See Report and Order, Page 34 , Paragraph 89.

I. Introduction and Summary

ICSA has carefully reviewed the Second Report and Order and believes the Commission was able to sort through the tremendous quantity of information submitted by all of the participants and came to an important set of conclusions and orders for the wireless industry to follow. Therefore this Petition for Reconsideration is not directed to overturn or take exception with the basic order but rather to request that additional rulings be made to improve wireless 911 safety based on ideas that were presented by ICSA and others during the course of the proceeding.

One of the most important conclusions of the Report and Order is that there is a significant problem in the completion of emergency calls in suburban and rural areas. The Commission accepted the Alliances[2] estimates that as many as 1/3 of the calls from portables phones in these areas will not reach an emergency operator! The Commission also acknowledged that most of the automobile fatalities occurred in these rural areas where 25,000 people died in 1996. In fact, the Report and Order states that "a person is as much as three times likely to suffer a fatality in a rural crash". The Commission also correctly concludes that "portable phones may not complete a call where a mobile phone can" because they operate at .6 watts instead of the 3 watts for a mobile. In our submissions, we made the point that 80% to 90% of all phones sold today by the industry are portables. Consumers are not told that the coverage maps are for the more powerful mobiles and not that of a portable operating from inside a vehicle.

[2] Report and Order, Page 5, Paragraph 15.

Given the fact that some 60% of the consumers purchase cellular telephones for safety and emergencies, the combination of the factors create an untenable set of problems that the Commission only partly solved with this Report and Order. Consumer have little or no basis for making informed decisions on the best carrier or equipment. But the acknowledgment of the problems by the Commission is a good first start. During most of the four years of this proceeding, the industry as represented by the Cellular Telephone Industry Association(CTIA) tried to deny that there was a problem and opposed each and every proposal put forward by the Alliance and ICSA. It is obvious that the Commission did not agree with their position and this Report and Order is a small victory against an enormous effort put forward by this lobbying group.

Unfortunately, with the addition of the nine months of time for manufacturers to incorporate one of the three technologies in their phones, there will be another 15 million handsets added to an existing inventory estimated to be currently at about 85 million. This larger number reflects the fact that there are about 20 million unsubscribed phones that are being reconditioned, in inventory, older models not in use, etc. While most of the new phones sold are digital, they have an analog mode, must conform to this rule, and are likely to work in that analog mode in the rural areas for 911 calls. Therefore there will be approximately 100 million analog capable phones that can potentially be used in the US which will not have any of the new life saving features that are cover by this new order. Almost half of these phones have been added during the four years that this proceeding has been pending. CTIA in its press release regarding FCC 99-96 on

May 13, 1999 quotes Tom Wheeler as stating "it is unfortunate that it has taken four long years for the FCC to make it". ICSA believes that most of the delay and hence the problem of such a huge inventory of uncovered phones can be laid at the feet of the CTIA and its members which used ever possible opportunity to delay, confuse and oppose these rules.

ICSA in this petition is requesting that the Commission consider several ideas that will significantly improve 911 completion rates. We have grouped these ideas into two areas which will be detailed below: 1.) Consumer education and awareness 2.) Extension Phone Technology. We used these ideas in our written and ex parte presentations but despite extensive efforts by our members and our attorney they were not used or even mentioned in the Report and Order. ICSA can only hope that the Commission put so much effort into the deciding which technology should be chosen ie. Strongest Signal, A/B Roaming, etc. that it could not deal with the other issues that we presented. Now that this decision has been made, we think that the Commission should reconsider the ideas that we presented now that signal technology issue is behind it.

The first is consumer education/awareness. The FCC should require manufacturers to publish in their sales literature which of the three technologies they have selected to install in their phone. The user manual for the new phones should also contain a section that explains the technology incorporated in the phone and how to best use the phone in the case of 911 calls. The Commission should also require each cellular carrier to publish their coverage chart based on two or more profiles. One should be for the .6 watt handheld being used inside a

newer vehicle which has tinted windows similar to those at the Portals. The other profile should be for a 3 watt car phone with a 3 dB external gain antenna. These two profiles should be presented on the same piece of literature with two different colors as a form of "truth in coverage". This information should help the consumer select and use the best phone on the carrier with the fewest coverage gaps thereby maximizing their chances of making a 911 call if they have a new phone.

ICSA has had before the FCC for over 5 ½ years a petition to change section 22.919 of the rules to permit cellular extension phones. This issue is the second most frequently asked question on the FCC web page. With a cellular extension phone, a customer can have a powerful 3 watt car phone with a hands free feature for use when in the vehicle. This phone can have GPS and be connected to the air bag system for crash notification. The car phone can provide maximum coverage when in rural and suburban areas. When out of car, the .6 watt portable can be turned on and will work best in urban or in city areas. This technology best meets the Commission own points raised in the Report & Order[3]. Both phones can be on the same number with only one bill and pool of included minutes. This combination can give the consumer the best chance of completing calls and will bring significantly better call completion to the wireless users who are drawing from this large pool of about 100 million older phones. According to the Alliances' tests, had Ms. Spielholz and the Lechuga family had a 3 watt extension phone, to compliment their portables, their calls would have gotten

[3] Report & Order Paragraph 15 on Page 5

them help.

In summary, ICSA respectfully requests that the Commission promptly consider our petition for reconsideration and adopt what we believe are common sense ideas for further improvements of the wireless 911 system in this country.

II. Consumer Awareness and Education for 911 Calling

Listed below are a number of proposals that were identified during the course of this proceeding and should now be considered for a "Third" Report and Order:

1. Literature and Information Regarding Call Completion Technology - It was clear from this proceeding that none of the participants had a conclusive case for why their technology was best. There were no field test or simulations submitted to the Commission . Therefore the Commission now allows three different signal approaches with the marketplace and actual field use deciding which technology is best. ICSA believes that the product literature distributed by the manufacturers and the carriers should clearly state if new phones have this technology and which of the three techniques are employed. The users manuals should contain a section that briefly explains the fact that there are two carriers in most markets and that the phone may switch to A or B for 911 calls. The consumer should be instructed on how to use this feature and to maximize their chances of completing a 911 call. In time, Consumer Magazines, Groups such as the Alliance and ICSA will build experience in which technology works best in the real world. Articles can then be published and perhaps additional ruling making may be appropriate by the Commission. Consumers can then make

informed decisions on which technology is best for their needs.

2. The Voluntary Setting of Existing Phones to A/B or B/A - In the Report and Order[4] the Commission discusses the recommendation of WEIAD that the wireless industry should educate consumers about the A/B and B/A logic in their phones and that the programming should be voluntary. ICSA members have monitored this issues and find that phones sold through carriers are still factory programmed to only A or B. Moreover, we have not see any mailers or other methods of informing users about this issue. When ICSA members visited the Commission in the Portals building in Washington, D.C. , it was observed that there was very limited coverage in the building because of the reflective metal film on the windows. Certain parts of the building had some coverage of the A carrier and other parts had B side while inner areas had no coverage. As previously documented in our submissions, we pointed out the Washington Metro only has B side coverage by Bell Atlantic. To bring this matter closer to home, we believe that FCC employees and other who frequent these locations in Washington are at risk. We think the Commission should reconsider the voluntary nature of this recommendation since it appears to us that there is little or no compliance by the industry.

3. Carriers should provide better Coverage Maps to Consumers - Relative to safety, consumers have little or no basis of choosing a carrier or more importantly which type of phone ie. 3 watt car phone or .6 watt handheld. We believe that most of the maps given out by carriers are little more than a crude

[4] At Page 8 Paragraph 23 and 24

approximation of 3 watt mobile phones coverage. Since the Commission has established in this proceeding that phones are often involved in life and death issues, carriers should be required by the FCC to provide customers with "truth-in-coverage" maps. These maps should have at least two contours which show the 3 watt mobile area and the .6 watt portable pattern when used from inside a typical modern vehicle. These maps can be generated by computer simulation or by actual drive test which all carriers already keep in their engineering departments. Both ICSA and the Alliance submitted two maps which highlighted this problem. We have again attached them to this filing. One is Attachment 1 which is the "Dirty Little Secrets" ad and the other(Attachment 2) is an actual cell site signal pattern. Both highlight the significant difference between portable and mobile coverage. Most Federal Agencies that provide industry regulations require most products to have key information about their use or contents particularly when safety is involved. Consumers need this critical information to make an informed decision about which type of phone to buy and which carrier they should select. The Commission should require that carriers make this information available.

III. Extension Phones are Critical to Public Health and Safety

ICSA had numerous meetings at all levels of the Commission and paper filings over the last 4 ½ years on this issue. Most of the information is under Docket 92-115. However, ICSA also participated in Docket 94-102 since there were many common issues. Despite all of these efforts, there was no mention in the Report and Order about our ideas which could dramatically improve the safety

of wireless users in the suburban and rural areas. We are therefore requesting the Commission to reconsider its Second Report and Order and to accept a rule change that would permit extension phones as a possible solution to the problem of improving the completion of 911 calls. As in the case of the strongest signal, the industry will make this a far more complex issue that it needs to be thereby stalling and delaying a decision. This has worked for the last 4 ½ years. We will summarize below the key issues, benefits for the consumer, and proposed ideas for implementation:

1. Definition of an extension cellular phone - An extension cellular phone is a phone that has the same phone number and other information as does other phones used by the same owner or subscriber. Its importance to the 911 issue is obvious. Most subscribers would like a 3 watt phone with handsfree capability to use in the rural and suburban areas when in the vehicle and a handheld with .6 watts for use when outside. This capability as noted in the report and order is the best combination of equipment to make all types of calls including emergency ones..

All calls are charged to this one phone number and paid for the subscriber with a single monthly fee. Incoming calls follow the phone that is turned on. This configuration gives the user the best combination of equipment for call completion. This is an identical situation to home and business use of a land line phone. This is similar to having different phones on multiple floor in ones home or different types of equipment attached to the line such as cordless telephones, fax machines, or home alarms.

The CTIA has been very successful over the years in confusing the FCC and legislators in combining extension phones into the illegal activity of cloning. The cloning of cellular telephones as defined on the FCC and CTIA web sites is the illegal practice of stealing information from legitimate customers. Then this information is put into a phone so that "thieves can trick the wireless system's computers into thinking that the phone is being used by a legitimate customer". While the technical process may be similar, the extension phone is used by the legitimate customer who makes the calls and pays for all airtime. The cellular industry currently charges a minimum access fee of approximate $20 per month for every phone. They do not want to loose these billions of dollars of revenue each year if extension phones were allowed by the FCC so they have fought this issue.

2. This issue has been previously decided by the Courts and the Commission - In a meeting that ICSA had with Blair Levin, who in 1995 had the job of Managing Director of the Commission, he immediately saw that this issue was identical to the Hush-A-Phone and Carterphone cases that the Federal Courts decided against AT&T in the 1970's. The issue is also similar to the Cable Bureau's decision that the cable company can no longer charge by the television set but by the cable connection to the structure. Only the wireless industry has been successful in requiring each customer owned phone have a unique number and to pay a monthly charge. It has been estimated that 1 in 4 cellular consumers would be an extension user. Stated another way, today 1 in 4 users have two phone numbers because of two cars, car and boat, or the portable/mobile use.

This has resulted in billions of dollars of extra revenue by wireless carriers every year and this one of the reasons that they are so opposed to the allowing extension phones.

3. **Background of Extension Phones at the Commission -** In 1994, the Commission updated Part 22 of the rules. At the urging of CTIA, the FCC put language in the comment section of Part 22.919 which deals with the electronic serial number(ESN). The rules normally are intended to control the type acceptance of wireless devices. However, CTIA used their comment language in Federal Courts to stop extension firms from changing the ESN. This language is in paragraph 60 and gave authority to alter the ESNs of cellular telephones exclusively to the cellular carriers. Since only one extension phone can be used at the same time, we do not believe that this is "fraudulent" use just as an extension phones in one's home or office is not fraudulent. We believe that the monthly access fee is for a single number/line. The use of several phones with the same number one-at-a-time (which is forced by the cellular system) should be permitted. We strongly disagree with paragraph 60 which says that cellular carriers are entitled to all cellular revenue because these are public airwaves. The fact that cellular telephones use radio waves instead of wires is a totally misleading argument which CTIA has tried to use with the Commission on this issue.

Following the earlier meeting with Blair Levin, he ordered a "Summit Meeting" be held on July 27, 1995 with the FCC Wireless group, CTIA, AT&T, the Justice Antitrust Division, Motorola, Ericsson, TIA, Japan Radio, CellTek,

MTC and ICSA. We wrote a report (on file with the Commission) which summarized the meeting. Ironically the manufacturers such as Motorola and Ericsson sided with our position that because there are some 30 million phone in the marketplace that could be cloned, the new rule would have no effect on the fraud problem as CTIA and AT&T claimed. What we and the Commission did not know for another year or two is that several of the major manufacturers ignored the rule and continued to make phones that could be cloned. In attachment 3-A to that report, which is filed in Docket 92-115 , the Wireless Bureau asked us to submit detailed revisions to the rules permitting extension phones. It also built safeguards to prevent extension firms and their technology from crossing over into the world of illegal cloning fraud which was extensive at that time. In late 1995, we believe that Wireless Bureau recommended approval of extension phones but there was a deadlock with the Commissioners and it was never brought to a vote. The issues then went into the Bureau's backlog where it has remained despite many attempts by ICSA to get it active again.

4. ICSA and another firm, C2+, produced an expert wireless consultant which showed the Commission that Extension Phones were compatible with the cellular network.

At both of the 1995 meetings, our expert witness, Dr. Richard Levine testified that no harm would be inflicted on the cellular network if customer owned cellular extension phones were used. In fact, our technical solution of reprogramming the phone was a process that better met FCC rules because all phones could roam. Washington's CellularOne has a switch based solution that

states that users can only roam with one phone and yet they are charged $17.95 per month!. Our reprogramming costs amortized over the life of the phone is about $3 per month. CellularOne requires as we do that only one phone can be turned on at a time. If they can required this type of operation then our customers are just as smart and should be able to follow the same directions. Prior to this July 1995 meeting, Dr. Levine submitted a very detail written report which is on file with the FCC. CTIA had no major objections to this report or to Dr. Levine's testimony. They recognized his outstanding reputation and the power of his arguments.

5. We have proved to the FCC OET that Motorola, Audiovox and Ericsson continued making phones that did not meet the new FCC ESN rules - On March 6, 1998 ICSA met with the OET personnel at Columbia, Maryland and conclusively showed that phones that were type accepted after the new rules took place in January, 1995 did not meet the Commissions rules. The ESN's in a number of phones could easily be changed and these phones continued to work. One was the very popular Motorola StarTac. We believe the Commission should take action against these manufacturers. Ironically, the fact that the rules have been ignored still make the creation of extension phones possible using modern phones. A report on this meeting and demonstration is on file with the Commission.

6. The Commission's approval of extension phones would have a number of other benefits to Consumers - Listed below are a number of additional benefits that would accrue to consumers if extension phones are permitted:

a. The combined used of a mobile and a handheld on the same number should for the average person reduce the amount of time the portable is pressed against the head of the user. There had not been any conclusive proof that cell phone cause health problems. However, prudent judgment would suggest using a portable phone as little as possible. Extension phones would permit consumers to use a mobile when possible.

b. Approximately 20 states have pending legislation against the use of portable phones while driving. Again, it is desirable to be able to have an installed handsfree car phone as an extension to a portable. Car Kits for portable phones are expensive, lack a 3 watt amplifier, and are cumbersome to use because the phone has to be plugged in and out the car unit.

c. The National Highway Traffic Safety Administration has been testing and promoting automatic crash notification systems. These system require an installed car phone for a number so that they can connect to GPS and the air bag. This flies in the face of the fact that consumers are buying mostly handhelds. Extension phones are again perfect for this application.

d. Recently the Commission has publicized that it is running out of telephone numbers because of all of the pagers and wireless telephones. ICSA and others have estimated that 1 out of 4 subscribers have two or more phones that they use. Assuming extension phones were permitted by the Commission, then there could

be a saving or a return of 20 million phone numbers!

7. Consumers want cellular extension phones and estimates are that there were 100's of thousand of units programmed and in successful use. Until the cellular industry used the FCC rule 22.919 in Federal Court to drive most extension firms out of business, there were thousands of phones being converted into extension phones each day. In some areas such as Atlanta, extension phones and dealers were common place. It is assumed that these customer are still using their phones. Extension phones can be made compatible with the fraud control tools such as velocity checks, pin codes, fingerprinting and authentication.

8. In a November 20, 1998 filing by CTIA in this proceeding, they tried to make the case that customer who needed a 3 watt phone for suburban or rural use should install an unsubscribed phone with a unknown MIN. While CTIA is correct that wireless customer can use an unsubscribed phone to call 911, our member's marketing experience plus common sense shows that customers are not going to the expense and trouble to install a phone in a car when they can not make regular phone calls. In other words they are not going to buy and install a car phone for purely emergency usage which may never occur. Moreover, CTIA and it members have argued in this very proceeding strongly against unsubscribed phones because they cannot be called back in Phase I by a PSAP.

9. In 1998, CTIA convinced the Congress to pass the Cellular Protection Act which made it a felony to possess hardware or software that could be used to clone wireless phones. CTIA and their members had driven all or most of the local store front extension firms out of business. However, sales by firms on the

internet using FEDEX from remote sites begun to spring up making their Federal Court Temporary Restraining Order strategy difficult or impossible to use. As explained previously, key manufacturers(also their members) continued to make phones in violation of the current FCC rule 22.919 that could be used as extension phones. So the industry decided that a good strategy would to be convince Republican lawmakers to sponsor a law to make the possession of software or hardware that could be used to clone wireless phones a felony. The initial writing of the bill would also preclude tools to create legitimate extension phones. It would have also taken away the authority of the Commission to decide the pending extension phone issue. The reason ICSA believes that the bill was directed at extension phones is as shown in an RCR article, Attachment 3, all wireless fraud had dropped to a low of only .5 percent of 1998 revenues versus 3.9 percent in 1995. This is less than wireline fraud. In fact the industry issued cloning a "death certificate" at their November Fraud Conference. In a limited search for cloning prosecutions under the new Federal Law or any other law, none were found during the last year. We are sure there must be some but they were not found.

ICSA fearing an end run around the FCC process, went to members of Congress and explained the extension phone issue. The Congress acted and made changes to the law to permit extension phones if the Commission authorizes the process. Attachment 4 is CTIA own April 2, 1998 announcement relative to the new law. Attachment 3 pages 2 & 3 is RCR's coverage of CTIA's fraud conference in which Glenn Schmitt who is the key counsel to the Congress on this

law is quoted as saying that "the legislation deliberately left it to the Federal Communications Commission to determine whether mom-and-pop shops should be allowed to continue cloning of extension phones for legitimate wireless customers". Attachment 5 also the legislative history for the bill. In the House Representatives Morella and McCollum stated on the floor that the bill should not "direct the FCC to act in one way or another". Mr Leahy in Senate also brought the same issue up on their floor and thinks "the public interest may be well served by allowing competition into the extension cellular telephone business". Depending on the action taken by the Commission, the Congress is willing to amend the law if necessary. We believe that the amendments added to the law may very be enough if we get Commission permission for extension phones. In fact the law gives the FCC maximum control over this issue and takes away the fraud objection made in the past by the CTIA.

IV. **Conclusion** - ICSA believes that the Report & Order FCC 99-96 was a positive step forward. However, the rule change unfortunately will not improve call completion rates for almost 100 million analog and multimodal phone that will be in inventory by the time new phones are on the market. As explained above the Congress is looking to the Commission to make a decision on extension phone as it relates to the changes to Federal Wireless Protection Law passed last year. ICSA respectfully requests that the Commission consider this petition for reconsideration and the ideas put forth here to improve the completion rates for 911 calls. With Public Safety so important, we request prompt action on our

petition. We will be happy to meet with the Commission to better explain our ideas put forth here.

Respectfully submitted,

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July 27, 1999

GET RID OF THAT DIRTY LITTLE SECRET IN YOUR DESK DRAWER. *You know – the "coverage g*

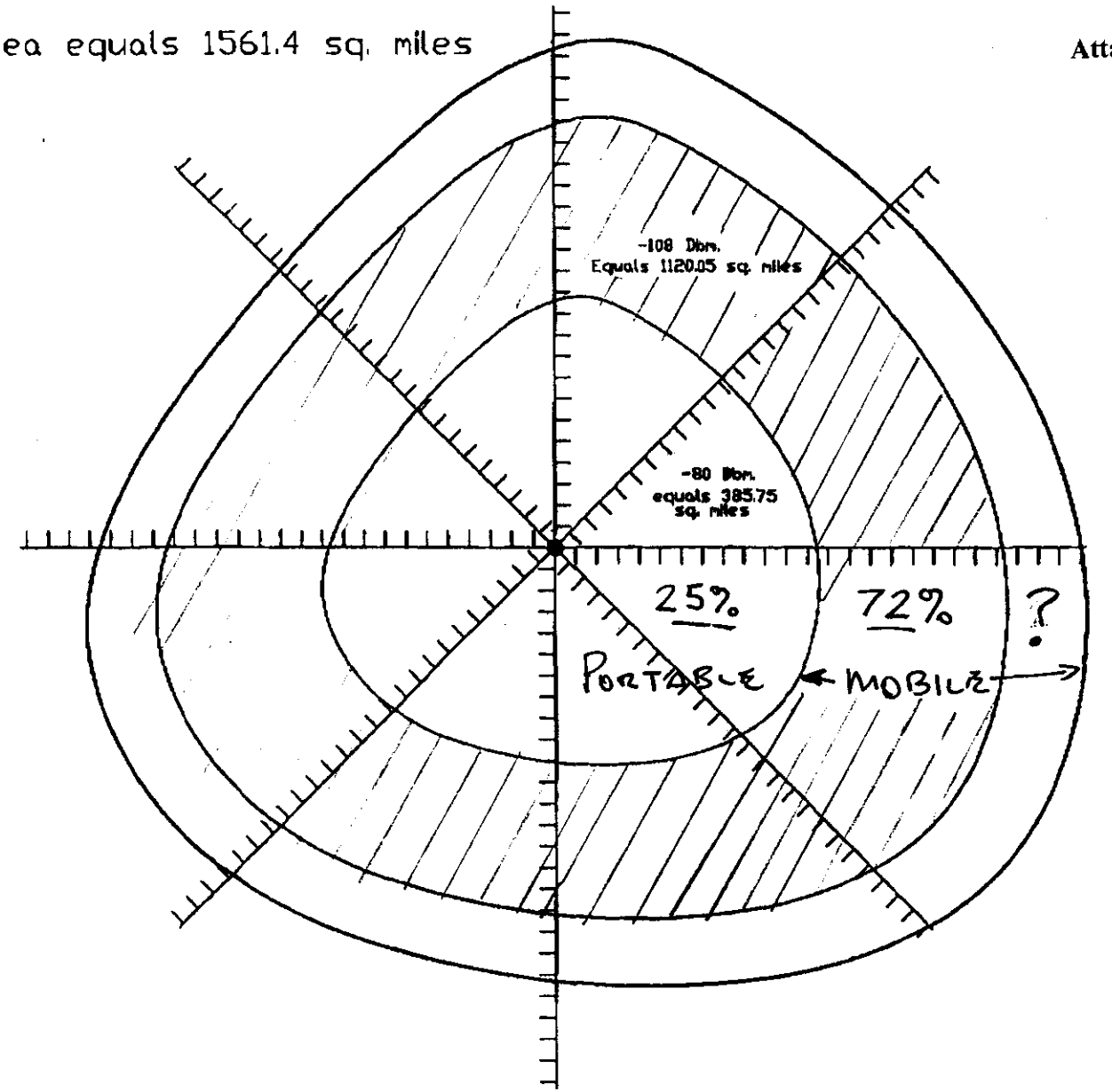
map." It's the map you check when you get persistent complaints about static and dropped calls in a specific area. Now there's

Attachment 1

SIGNAL STRENGTH

Total cell area equals 1561.4 sq. miles

Attachment 2



AIRPORT-BLVD

Attachment 3

RCR Wireless News

RCR

news opinion letters contact us calendar submit staff info

November 23, 1998

Fraud shows first decline

By Elizabeth V. Mooney

ORLANDO, Fla.—Despite the reluctance of some carriers to report fraud figures and the inability of many to distinguish fraud from bad debt, a popular consensus is that fraud against wireless telecom providers appears to be declining, at least for now.

"If we think we can rest on our laurels, we are wrong," said Thomas E. Wheeler, president and chief executive officer of the Cellular Telecommunications Industry Association, at the group's Wireless Security conference earlier this month.

CTIA said it anticipates fraud losses for domestic carriers will comprise 0.5 percent of 1998 revenues, down dramatically from 3.9 percent of revenues in 1995. Total losses attributable to fraud are expected to be just under $200 million this year, according to CTIA.

Dave Daniels, director of corporate fraud prevention for AirTouch Cellular, Irvine, Calif., offered a variation on this theme. He said fraud losses this year will total $450 million, about 1.5 percent of revenues, down 62 percent from 1996 levels when they were $840 million, or 4 percent of revenues, he said.

Worldwide, fraud "is a $12 billion business," with subscription fraud gaining fast on technical fraud as the leading variety, said Ray Davis, vice president of business for telecommunications and utilities at Equifax, Atlanta.

"I'm not so sure (fraud loss) will go too far below 1 percent because the energy and resources that management is willing to put into (controlling fraud) after that will decline," Daniels said.

CTIA said it attributes the reduction in wireless fraud to an "arsenal of containment tools rather than a single magic bullet." These measures include authentication, radio-frequency fingerprinting, roamer verification and reinstatement, profilers, personal

identification numbers and prepaid (calling) cards.

Coming, new kinds of fraud

A variety of new criminal techniques are works in progress, and carriers remain vulnerable. New avenues for fraud include " 'vampires', which load new numbers into a phone after each call, and profilers don't see them," Daniels said.

The much ballyhooed dual-mode phone poses security threats to personal communications services carriers that have not implemented authentication technologies.

The newly launched and about-to-be launched satellite telecommunications services can be a gold mine for thieves who insert stolen subscriber identity module cards into them, then roam worldwide seamlessly and unseen by carrier networks.

The Internet, toward which both commerce and telecommunications transmission is headed, offers criminals a wide open opportunity to steal services from carriers and the identities of their customers.

Roaming arrangements between United States carriers and those in Asia and South America are stymied by the reluctance and even inability of many foreign counterparts to account for and discourage fraud in their own markets.

"There is a business case to be made for getting out ahead of the next generation of fraud because fraudsters will continue to innovate," said David Thompson, president and chief executive officer of Corsair Communications Inc., Palo Alto, Calif.

Help from the Hill

The fraud-fighting arsenal received two new weapons from Congress and President Clinton last session, Wheeler said. The first closes some of the loopholes that permitted illegal scanning and handset cloning devices to be used.

"For the first time, the law allows the (law enforcement community) to pursue people who traffic in identification information, including [electronic serial numbers] and [mobile identification numbers]," said Glenn Schmitt, counsel to the U.S. House of Representatives Subcommittee on Crime.

The teeth that give the new statute its bite come from the fact that law enforcement officials no longer need to prove a suspect intended to defraud anyone in order to prosecute him or her for trafficking in

identification information, said Albert Gidari, an attorney with the Seattle law firm of Perkins Coie.

"Prosecutors were reluctant to pursue this because intent is difficult to prove," he said.

"This law also will help carriers stop Internet site owners from posting cloning and identity theft products."

However, the legislation deliberately left it to the Federal Communications Commission to determine whether mom-and-pop shops should be allowed to continue cloning of extension phones for legitimate wireless customers, Schmitt said.

"The communications industry itself liked the cloning of ESNs (for a single MIN) because it's a good marketing tool," said Gerald Vaughan, deputy chief of the FCC Wireless Telecommunications Bureau.

"The people in this room may not want it, but the people in your marketing department like it."

Legal punch against ID theft

The second new legal arrow in the wireless fraud-fighting quiver strengthens laws against identity theft, Wheeler said. This is a subset of subscription fraud, which is increasing in all its variations as a percentage of total wireless fraud.

According to U.S. Rep. Bill McCollum, there are 2,000 reported identity thefts each week in this country from financial services institutions, like credit-card companies. The overall total is closer to 1,200 cases daily, according to Deborah Ruffin, manager of customer assurance operations for GTE Wireless, Roswell, Ga. Insurance against these losses made financial services companies reluctant to pursue the perpetrators, according to U.S. Sen. Jon Kyl (R.-Ariz.).

"The new federal law against identity theft is in essence a subscribers' bill of rights because they can pursue on their own some cases that carriers don't. You will see a lot more calls from customers who received their first bill with inordinate charges," Gidari said.

"There is some carrier confusion over whether they can release (to a subscriber his or her) records without a subpoena from a law-enforcement agency. There is no coherent answer."

A wireless service provider probably can release a customer's records if that customer has been a victim of identity fraud, Gidari said.

However, there are situations in which law-enforcement agents ask the victimized subscriber to request his or her records from the carrier. In those instances, the question is whether a formal subpoena is required for release of records.

Cloning a comeback kid

Cloning was issued a death certificate at the CTIA conference, and no one mourned its passing.

However, Gary Bernstein, commercial director for Praesidium, a consulting firm based in Wiltshire, United Kingdom, said reports of its death are premature. Cloning, this time of Global System for Mobile communications SIM cards, likely will rear its ugly head within a few years.

"There have been no commercial cases of SIM card cloning, although it has been done in the lab. But this will become an issue after 2000. Right now, there is no effective means to manage this," he said.

Roamers as robbers

This concern is just one of many related to the larger problem of roaming fraud, within and between countries, that carriers confront today.

"The key attraction for fraudsters is international dialing, routing calls back to third countries; it's inevitably linked to call selling," Bernstein said.

"Roaming adds delay in detection. The key problem is that once a customer roams onto a foreign network, the domestic carrier can't see what the customer is doing."

Praesidium concentrates on outbound country-to-country roaming, primarily involving GSM networks, because that is when the home carrier bears all of the risks and only receives a small percentage of the revenues.

"Some proprietary near real-time call details are coming. In 1999, there are plans for an international [intelligent network] platform for GSM to give full control and visibility in near real-time and call cut-off capability," Bernstein said.

"The big difference from managing fraud in the United States is that international operators won't choose an anti-fraud product unless it [follows] a standard, like [those of the European Telecommunications

Attachment 4

CTIA Says Anti-Cloning Bill Will Crack Down on High-Tech Criminals

April 2, 1998

Senate Passes "Wireless Telephone Protection Act; On to the President's Desk for Signing Into Law

WASHINGTON, D.C., April 2, 1998 - Late last night the U.S. Senate passed The Wireless Telephone Protection Act, S. 493, sponsored by Sen. Jon Kyl (R-Arizona) by unanimous consent. The House companion bill, H.R. 2460, was passed on February 26, 1998.

"This is a great day for wireless service customers," said Thomas E. Wheeler, President and CEO of the Cellular Telecommunications Industry Association. Wheeler also thanked House and Senate sponsors of the measure. "We appreciate the hard work and dedication of Senator Kyl as well as Reps. Sam Johnson (R-Texas), Charles Schumer (D-New York) and Chairman Bill McCollum (R-Florida) to pass this legislation. This bill will make it more difficult to traffic and possess equipment that is used for cloning wireless telephones."

Specifically, the new law includes:

- A new section to 18 U.S.C. Section 1029 which makes clear that there is no lawful purpose to possess, produce, use or sell hardware or software used for cloning a wireless phone or its ESN.
- A revised definition of "scanning receiver" to include devices that can intercept ESNs, MINs, or other identifier numbers.
- An exemption for law enforcement and telecommunications service providers to possess the otherwise illegal cloning hardware and software or altered telecommunications instruments as part of their normal investigative activities.
- Increased penalties for cloners.

The Senate previously passed the anti-cloning bill on November 10, 1997; last night's action was to adopt House language on the issue of extension phones. The Senate bill will be sent to President Clinton, who is expected to sign the legislation into law.

CTIA is the international association for the wireless telecommunications industry.

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Attachment 5

The removal of the `intent to defraud' language in 18 U.S.C. 1029 only applies to the possession and use of the hardware and software configured to alter telecommunications instruments. It does not apply to those who are in the possession of cloned phones. Nor does it apply to those in the possession of scanning receivers (which do have some legitimate uses). Someone who does not know that a telecommunications device has been altered to modify a telecommunications instrument would not be criminally liable under this section.

I am very proud of this important crime-fighting legislation and look forward to its prompt signature by the President.

Mr. LEAHY. Mr. President, in 1994, I authored the first law to provide specific protection against `clone' telephones. While the main focus of the Communications Assistance for Law Enforcement Act, or CALEA, was to help our law enforcement agencies deal with the challenge of new digital telecommunications equipment and services, the law also contained important bans on the use and trafficking of clone phones, scanning receivers, and hardware and software used to steal cellular service.

Specifically, in CALEA, we amended the Counterfeit Access Device law, 18 U.S.C. 1029, by adding a provision to criminalize the use and possession, with intent to defraud, of altered telecommunications instruments, or *scanning* receivers, hardware or software, to obtain unauthorized access to telecommunications services. This law also added to the federal criminal code a definition of scanning receivers to mean devices used to intercept illegally wire or electronic communications.

`Clone' telephones are used illegally to allow free riding on the cellular phone system and result in theft of that service. The cellular telephone industry estimates that it loses $650 million per year due to clone phones. I recall testimony at hearings I chaired jointly with Representative Don Edwards on CALEA about the need to address this problem in CALEA. Tom Wheeler, President of the Cellular Telecommunications Industry Association, testified in 1994 about:

[Page: S3021]

. . . people being surprised by `humongous' cellular bills because somebody had snatched their electronic code out of the air, cloned that into another phone, and was charging phone calls to Colombia or wherever onto their phone.

S. Hrg. 103-1022, at p. 148 (August 11, 1994).

In short, the theft of cellular telephone services amounts to millions of dollars of losses to wireless service providers and to consumers.

Just as disturbing, clone phones are used by drug dealers and other criminals trying to evade police surveillance of their phone conversations. The fraudulent use of electronic serial numbers, which are critical in identifying the cellular phone subject to wiretap orders, represented a real threat to privacy. Mr. Wheeler explained in 1994, `If you have a situation where there is floating around out there multiple users of the same electronic serial numbers, you don't know who you are tapping.' S. Hrg. 103-1022, at p. 148 (August 11, 1994).

Given the financial losses and the threats to privacy posed by clone phones, I urge the cellular telephone industry to consider the technical means available to better protect cellular phone service. In particular, if strong encryption were used to encrypt the radio waves transmitted from cellular phones to the nearest

cell tower, stealing those signals for use in a clone phone would be much more difficult, if not impossible.

I have long been a proponent of more widespread use of strong encryption. Clone phones are a perfect example of where the use of strong encryption would be far more effective to prevent this crime from occurring than all the criminal laws we could consider passing.

This bill, as modified by the House, builds upon the work we accomplished in CALEA.

Current law contains an `intent to defraud' requirement that has apparently posed a stumbling block for law enforcement to crack down on the cloning of cellular phones. This bill would remove this intent requirement and make it illegal to use, sell or possess hardware or software knowing it has been configured for the purpose of altering a telephone to steal service.

The House of Representatives made a number of significant improvements to S. 493 to ensure that, upon removal of the `intent to defraud' requirement, the bill did not sweep too broadly. Indeed, I understand that even some cellular companies were concerned that the original bill introduced by Senator Kyl might inadvertently have applied to machinery used by legitimate companies to test or reprogram their equipment.

Removal of the `intent to defraud' scienter requirement may still pose problems for those legitimate companies that with to offer `extension' telephones for cellular telephones. In fact, the Federal Communications Commission has a proceeding underway to determine whether companies may be allowed to alter the electronic serial number of a cellular telephone to allow more than one phone to have the same contact number.

Passage of this law may be interpreted as prejudging the outcome of that proceeding by making illegal the use of clone phones, even by legitimate subscribers who pay their bills. That would be regrettable. This bill should not affect the outcome of the FCC proceeding, since the public interest may be well served by allowing competition into the extension cellular telephone business. Depending on the outcome of the FCC proceeding, we may be revisiting this legislation.

This bill, as modified by the House, is supported by the FBI, Secret Service and the Cellular Telephone Industry Association (CTIA). We made important progress in this area when we passed CALEA, and I am glad to support legislation that will further help law enforcement combat cellular telephone fraud by those who steal cellular service.

Mr. DOMENICI. Mr. President, I ask unanimous consent that the Senate concur in the amendments of the House.

The PRESIDING OFFICER. Without objection, it is so ordered.

END

WIRELESS TELEPHONE PROTECTION ACT (House of Representatives - February 26, 1998) <hr><p><p>Mr. McCOLLUM. Mr. Chairman, I yield such time as she may consume to the gentlewoman from Maryland (Mrs. Morella).
<p>Mrs. MORELLA. Mr. Chairman, I thank the gentleman for yielding me this time. I would like to engage the gentleman in a colloquy on cellular extension phones.
<p>Mr. Chairman, I understand that many cellular subscribers find it advantageous to have two cellular phones with the same number. In this way, someone trying to reach a subscriber need only dial one number and the subscriber will be able to receive the call on either his or her car phone or on his or her portable hand-held phone. I also understand that the FCC currently prohibits companies from altering the electronic serial number of a cellular phone to allow more than one phone to have the same telephone number, but that the commission has been asked to reconsider that rule. I wonder, how would this bill affect the petition for reconsideration of this matter that is now pending before the FCC?
<p>Mr. McCOLLUM. Mr. Chairman, will the gentlewoman yield?
<p>Mrs. MORELLA. I yield to the gentleman from Florida.
<p>Mr. McCOLLUM. I thank the gentlewoman for her inquiry. In passing H.R. 2460, we do not intend to direct the FCC to act in one way or another on the pending petition for reconsideration that she has described. If the FCC were to change its rules, however, I think it is important for Members to understand that even though they did change those rules, the bill would still prevent the use, possession, production, and so forth, of hardware or software to insert or modify electronic serial numbers or other telecommunication identifying information to create extension phones. If the FCC does decide that a change in its rules serves the public interest, I would be willing to consider amending section 1029 in such a way as to conform the bill to the spirit of the FCC's decision, yet still making sure that this equipment would be unlikely to fall into the hands of criminals.
<p>Mrs. MORELLA. Mr. Chairman, that sounds reasonable.